APPENDIX O

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT (PHASE I ESA)

PREPARED FOR:

CITY OF BURBANK
MAGNOLIA POWER PLANT EXPANSION

PREPARED BY:

URS CORPORATION
PROJECT NO. 66-00000084.00

DECEMBER 2000

This report presents the results of a Phase I Environmental Site Assessment (Phase I ESA) conducted by URS Corporation (URS) of a portion of the City of Burbank Public Services Department (PSD) facility located at 164 West Magnolia Boulevard in Burbank, California. Specifically, the ESA focused on the portion of the overall site expected to be used for the Magnolia plant expansion. The majority of the PSD facility is occupied by electrical generating and utility service equipment, and a smaller portion of the facility is occupied by other PSD maintenance facilities. The Phase I ESA was conducted to evaluate the potential for material environmental impairment at the site associated with past and current site operations and nearby land use, and to identify Recognized Environmental Conditions (RECs) affecting the subject property. The Phase I ESA was conducted in accordance with the methods and procedures described in the American Society for Testing and Materials (ASTM) "Standard Practice for Site Assessments: Phase I Environmental Site Assessment Process" (E 1527-97 as currently amended). The Phase I ESA was conducted pursuant to, and in accordance with, the URS proposal dated, September 1, 2000, as authorized by the Southern California Public Power Authority (SCPPA) and the City of Burbank. Following is a summary of our findings.

The subject property consists of only a portion of the City of Burbank PSD facility. The subject property includes Magnolia Units #1 and #2, associated cooling towers and areas to the east of the cooling towers, a transformer storage area, a large 78,000-barrel aboveground storage tank (AST) and a storage yard located adjacent and to the east of the Olive Cooling Tower #2. Magnolia Units #1 and #2 were constructed in 1941 and 1943 and then shutdown in the 1980s. Most major mechanical, electrical control, instrumentation equipment, and boiler piping were removed in the 1980s. Units #1 and #2 building structures, steam turbines and cooling towers remain in place. The 78,000-barrel fuel AST was put in place in the mid 1950s and is reportedly currently empty and clean. The remainder of the subject property has historically been used for City of Burbank Street Department activities and included a concrete batch plant and a vehicle storage area. The area is currently used as a storage area and was observed to be asphalt paved during the site reconnaissance. Several bins of waste wood and scrap metal were observed on the northern boundary of this area. The remainder of the area was observed to be vacant.

The subject property is located in the southwest portion of the San Fernando Valley. The San Fernando Valley is a west–northwest trending interior coastal basin approximately 23 miles long and 12 miles wide. The San Fernando Valley is a down-faulted valley, which has been partially filled with alluvial sediments. The valley slopes gently to the south-southeast, towards the Los Angeles River. The San Fernando Valley Groundwater Basin is the largest of four hydrologic basins within the Upper Los Angeles River Area. The soils underlying the subject property consist of sand, silt, silty sand and silty clay. The depth to groundwater below the subject property is reported to be approximately 100-125 feet below ground surface (bgs) and is reported to flow towards the south-southwest.

Significant quantities of hazardous materials were observed on the subject property and the adjacent portions of the PSD facility during the site reconnaissance. Significant quantities of petroleum products and hazardous substances associated with cooling towers were reported to have been historically stored at the PSD facility in ASTs and underground storage tanks (USTs).

A review of available environmental databases indicates the subject property was identified on the Cortese, UST, LUST Ca. FID, PADS, FINDS, RCRIS-LQG, HMS and HAZNET databases. The database reported the facility as a large quantity generator of hazardous waste. The subject property was reported to generate waste oil, waste halogenated solvents, and PCB waste. No violations were reported associated with hazardous waste. The database identified the use of 13 USTs onsite. The subject property reported a release of diesel to soil. The status was reported as pollution characterization underway. No additional information was available on the EDR database report.

Based on the Phase I ESA results described herein, the following conclusions are made:

On-Site Recognized Environmental Conditions (RECs)

Based on information obtained through completion of this Phase I ESA, RECs from on-site sources have been identified and are summarized below:

- Sulfuric acid, caustic soda, and chrome compounds have been historically used in the cooling tower operations. Because the cooling towers were previously located on bare soil, and due to the length of time the cooling towers have been in operation, the potential of subsurface impacts to the subject property exists.

- A historical dumping area was located on the subject property. Because the type and quantity of materials dumped in this location are not known, the potential for subsurface impacts to the subject property exists.

- One 78,000-barrel AST is located on the subject property. The AST previously stored fuel oil. The AST is located on bare soil. No soil sampling or analysis has been conducted beneath or around the AST.

- Three fuel oil USTs were historically located in the basement between Magnolia Unit #1 and #2. The USTs have reportedly been removed, although no soil sampling and analysis was conducted, and no closure report was provided.

- Storage of a variety of hazardous materials such as sulfuric acid, caustic soda, hazardous waste, PCBs, and paint related materials has occurred and these materials have been used

throughout the subject property. Releases of caustic soda and sulfuric acid were reported on the northern portion of the subject property. Because of the reported releases and the potential historic housekeeping issues onsite, there is potential for these materials to have impacted the soil beneath the site.

- A large release of fuel oil from a tanker truck was reported on the subject property. No soil sampling or analysis was conducted in this area.

Off-Site Recognized Environmental Conditions (RECs)

Based on URS's review of historical information and the environmental database search, RECs from off-site sources have been identified and are summarized below.

- A solvent sump reportedly released materials to the soil located in Magnolia Unit #3 (located adjacent to the south of the northern portion of the subject property). No documentation pertaining to the sump was available for review.

- Several large USTs (40,000-barrel and 53,000-barrel) were located in the PSD facility adjacent to the subject property. The USTs were reportedly closed in place. No documentation was available regarding the tank closures. Soil sampling and analysis was reportedly not conducted.

- One 25,000-barrel AST is located the north and the northwest of the southern portion of the subject property. The AST previously stored fuel oil. The AST is located on the bare soil. No soil sampling or analysis has been conducted beneath or around the AST.

- A vehicle maintenance shop is located adjacent to southwest of the subject property. Based on the historic use and storage of hazardous materials in this location, there is potential for the subsurface of the subject property to have been impacted.

- One facility that is anticipated to have a high potential to impact the subject property was identified on the EDR database report less than 1/8 mile to the north of the subject property. The San Fernando Valley, Crystal Springs Wellfield Area was identified on the CERCLIS, FINDS, NPL, ROD, and Cal-Sites databases. The facility reported a release of chlorinated organic solvents to groundwater (PCE and TCE). The facility is a listed NPL site that has reported human health risk assessment, ecological risk assessment, RI/FS, Record of Decision, and Order on Consent.

Recommendations

Based on the results of URS's Phase I ESA of the subject property, further investigation is warranted at this time. Due to the nature of the current and historic operations onsite, and because of the current and historic use and storage of hazardous materials, ASTs, and USTs, a Phase II Investigation of soil conditions on the subject property is recommended. Further, we anticipate that CEC will require adequate characterization of the subject property as part of the Certification process. See Section 9.0 for Phase II recommendations.

This Executive Summary is not intended to be a "stand-alone" document, but a summary of our findings as described in the following report. It is intended to be used in conjunction with the scope of services and limitations described therein.

This report presents the results of a Phase I Environmental Site Assessment (Phase I ESA) conducted by URS Corporation (URS) of a portion of the City of Burbank Public Services Department (PSD) facility located at 164 West Magnolia Boulevard in Burbank, California. Specifically, the ESA focused on the portions of the overall site expected to be used for the Magnolia expansion project. The majority of the PSD facility is occupied by electrical generating and utility service equipment, and a smaller portion of the facility is occupied by other PSD maintenance facilities, such as the City of Burbank Water Distribution Department.

The subject property consists of only a portion of the City of Burbank PSD facility. The subject property includes Magnolia Units #1 and #2, associated cooling towers and areas to the east of the cooling towers, a transformer storage area, a large 78,000-barrel aboveground storage tank (AST) and a storage yard located adjacent and to the east of the Olive Cooling Tower #2. A Site Plan is included as Figure 2.

1.1 PURPOSE AND SCOPE OF SERVICES

The Phase I ESA was conducted to evaluate the potential for material environmental impairment at the subject property associated with past and current site operations and nearby land use, and to identify Recognized Environmental Conditions affecting the subject property.

It is our understanding that the City of Burbank is considering re-developing the subject property to expand the electrical generating facility. The proposed project calls for the installation of a combustion gas turbine, heat recovery steam generator and associated equipment on the site.

The Phase I ESA was conducted pursuant to, and in accordance with, the URS proposal dated, September 1, 2000, as authorized by the Southern California Public Power Authority (SCPPA) and the City of Burbank. Following is a summary of our findings. Based on the scope of services outlined in the proposal, the Phase I ESA specifically did not include testing for asbestos, radon gas, lead-based paint, or lead in drinking water; testing of soil or groundwater; or evaluation of wetlands or cultural resources. In addition, this ESA did not include a compliance audit.

1.2 ASTM STANDARD

This report was prepared in general conformance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard E 1527-97). This standard defines a Recognized Environmental Condition (REC) as: "The presence or likely presence of any

hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

Information concerning the subject property was obtained from a site reconnaissance conducted by Ms. Tricia Winterbauer and Mr. Douglas Hahn of URS, on November 1, 2000, interviews with representatives of the subject property, and review of the documents referenced in this report.

2.1 LOCATION

The subject property is located at the southeast corner of West Magnolia Boulevard and Lake Street in the City of Burbank, approximately ¼ mile south of the Interstate 5 Freeway. A Site Vicinity Map is provided as Figure 1.

2.2 FEATURES/USE

The City of Burbank PSD facility located at 164 West Magnolia Boulevard in Burbank, California. The majority of the PSD facility is occupied by electrical generating and utility service equipment, and a smaller portion of the facility is occupied by other PSD maintenance facilities. The City of Burbank operates and maintains two adjacent, interconnected power generation facilities located on 16 acres of the PSD plant. The two facilities are the Magnolia Power Station and the Olive Power Station. The Magnolia Station was developed with five units. Units #1 and #2 were gas fired thermal units that were shut down and partially demolished. Units #3 and #4 were gas fired units that were shutdown in 1996, but are kept in active reserve. Unit #5 is a gas fired combustion turbine that is currently operational as a peaking unit. The four units of the Olive Power Station are still operational. Units #1 and #2 are gas fired thermal units. Units #3 and #4 are gas fired combustion turbine units.

The subject property studied in the Phase I ESA consists of only a portion of the PSD facilty. The subject property consists of a Magnolia Units #1 and #2, associated cooling towers and areas to the east of the cooling towers, a tranformer storage area, a 78,000-barrel AST and a storage yard located adjacent to, and to the east of the Olive Cooling Tower #2. A Site Plan is provided as Figure 2.

Magnolia Units #1 and #2 were constructed in 1941 and 1943 and then shutdown in the 1980s. Most major mechanical, electrical control, instrumentation equipment, and boiler piping were removed in the 1980s. Units #1 and #2 building structures, steam turbines and cooling towers remain in place. An area to the east of the cooling towers was observed to be asphalt-paved and was observed to be vacant or used for storage. Storage of transformers was located in this area.

The storage yard located to the south of the 78,000-barrel AST has historically been used for City of Burbank Street Department activities and included a concrete batch plant and a

vehicle storage area. The area is currently used as a storage area and was observed to be asphalt paved during the site reconnaissance. Several bins of waste wood and scrap metal were observed on the northern boundary of this area. The remainder of the area was observed to be vacant.

2.3 SITE VICINITY AND ADJACENT PROPERTIES

URS's observation and evaluation of adjoining properties were limited to features and conditions that were visible from public rights-of-way. The following observations were made.

North: Adjacent portions of the PSD facility, Magnolia Boulevard and beyond that commercial/light industrial development (International Electrical Research Center, 3D Plastics).

South: Adjacent portions of the PSD facility, Olive Avenue and beyond that commercial/light industrial development (Metro RV Sales, Borman Steel)

East: Burbank Western Wash (a west feeder channel of the Los Angeles River), and beyond that commercial/light industrial development (MTA Lot and Station)

West: Adjacent portion of the PSD facility, Lake Street, and beyond that commercial/light industrial development (a rental facility and lumberyard, and various auto repair facilities)

The adjacent properties and site vicinity consist primarily of commercial and light industrial development.

3.1 TOPOGRAPHY

According to the Burbank, California Quadrangle United States Geological Survey (USGS) 7.5-minute topographic map, the subject property is located at an elevation of approximately 560 feet above mean sea level (msl). The topography of the site vicinity is relatively flat, but slopes slightly to the south.

3.2 GEOLOGY/HYROGEOLOGY

The subject property is located in the southwest portion of the San Fernando Valley. The San Fernando Valley is a west–northwest trending interior coastal basin approximately 23 miles long and 12 miles wide. The San Fernando Valley is surrounded by the Simi Hills to the west, the Santa Monica Mountains to the south, the Santa Susana Mountains to the north and northwest, San Gabriel Mountains to the northeast, and the San Rafael Hills to the east. The San Fernando Valley is a down-faulted valley which has been partially filled with alluvial sediments. The valley slopes gently to the south-southeast, towards the Los Angeles River. Sediments within the valley were primarily deposited along the major tributaries to the Los Angeles River.

The San Fernando Valley Groundwater Basin is the largest of four hydrologic basins within the Upper Los Angeles River Area. Groundwater recharge to the basin occurs from direct infiltration of precipitation, artificial recharge of imported water and treated wastewater effluent and subsurface inflow from the adjacent groundwater basins. Depths to groundwater within the alluvial deposits of the basin range from approximately 50-300 feet below ground surface (bgs).

The soils underlying the subject property consist of sand, silt, silty sand and silty clay. The depth to groundwater below the subject property is reported to be approximately 100-125 feet bgs and is reported to flow towards the south-southwest.

3.3 SURFACE WATER

The nearest source of surface water is the Burbank Flood Control Channel located adjacent to the east of the PSD facility.

URS' understanding of the subject property's history is based on our review of historical aerial photographs, historical topographic maps, interviews, and other referenced documents, as available.

4.1 CURRENT AND PRIOR OWNERSHIP

The subject property is currently owned by the City of Burbank. The City of Burbank has operated the subject property as the PSD facility since 1941. Prior ownership information was not available. The subject property was reportedly used for agricultural purposes and was developed with a school house and play yard prior the construction of the PSD facility.

4.2 INTERVIEWS

Mr. Michael R. Simmonds, Power Plant Supervisor, was interviewed and provided subject property information. According to Mr. Simmonds, the subject property has operated as an electrical generating facility since 1941. Additional information from this interview is included in Section 5.0 below.

4.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

The following documents discuss Phase II work conducted on areas of the Magnolia and Olive Plants. Tanks D-1 and D-2 are located on the subject property. The remaining tanks discussed below are considered adjacent to the subject property.

D-1, D-2, D-3, D-4 and D-5 Closure Report, September 1998, prepared by El Capitan Environmental Services, Inc.

According to the report, Tanks D-1 and D-2 were located adjacent to the east of Magnolia Cooling Tower #3 and were 20,000-gallon USTs constructed of single-wall steel. The two USTs stored diesel fuel and were inserted with dry ice, cleaned, excavated and removed from the site. Tanks D-3, D-4, and D-5 were 40,000-gallon USTs that were located adjacent to the south of Olive Cooling Tower #1 and were constructed of single-wall steel. The three USTs had previously contained diesel fuel and were excavated and removed from the site. All underground piping associated with the diesel tanks was drained and rinsed prior to tank removal. Analytical results of soil samples beneath the USTs and stockpiles did not show the presence of TPH, BTEX or MTBE. Trace concentrations of ethylbenzene and total xylenes were reported in one soil sample collected beneath the piping. TPH was generally non-detectable. El Capitan recommended a site closure with no further action at the locations of the former USTs D-1, D-2, D-3, D-4, and D-5 and their associated piping. URS reviewed a closure letter for Tanks D-1, D-2, D-3, D-4 and D-5 at the City of Burbank Fire Department.

Underground Fuel Oil No. 6 (F-1 and F-2) Storage Tank Closure Report, September 1988, prepared by El Capitan Environmental Services, Inc.

According to the report, two USTs (Tanks F-1 and F-2) were closed in place at the Magnolia Unit #3 in 1998. The USTs were pumped of product and residue and rinsed. According to the report the USTs were constucted of reinforced concrete and had storage capacity of 40,000 barrels and 53,000 barrels. Visible cracking was observed on the interior surfaces of both tanks. The underground piping associated with the USTs was drained and excavated. The excavated trenches were backfilled with excavated soil and clean imported soil and paved with asphalt or concrete as applicable. El Capitan concluded that field observations and analytical results of the subsurface soil samples collected from the bottom of the USTs did not show the presence of significant petroleum hydrocarbons. Two trench sidewall samples revealed the presence of relatively high concentrations of total petroleum hydrocarbons (TPH). Based on the limited mobility of fuel oil #6, El Capitan concluded that it was unlikely contamination had migrated substantially beyond the immediate vicinity of the USTs. El Capitan also concluded that "based on observations and analytical results, soil samples collected from the associated piping did not show the presence of significant petroleum hydrocarbons, except in a few locations." The contaminated soil was removed wherever it was easily accessible. Approximately 44 tons of fuel oil impacted material were removed and disposed of offsite. According to the City of Burbank Fire Department, a closure letter for Tanks F-1 and F-2 will be issued shortly.

Underground Storage Tank Closure Report for Tanks T-1 through T-5, City of Burbank Public Service Yard, May 3, 1999, prepared by URS Greiner Woodward Clyde.

The report addressed the closure of five USTs that were removed from the Public Service Yard located in the northwest corner of the PSD facility. The USTs removed included one 1,000-gallon steel UST containing waste oil, one 2,000-gallon steel UST containing solvents, two 10,000-gallon UST containing unleaded gasoline, and one 5,000-gallon UST containing diesel. Following removal of the USTs, a total of 9 soil samples were collected beneath the tank locations and sidewalls of the excavation. The results of the soil samples were reported at well below PRGs. According to the City of Burbank Fire Department, a closure letter will be issued shortly.

4.4 AERIAL PHOTOGRAPHS

Historical aerial photographic coverage for the subject property was provided by Environmental Data Resources, Inc. (EDR) for the years 1928, 1952, 1968, 1976, 1989, and 1994.

1928 The subject property appears to be used for agricultural purposes in the 1928 aerial photograph. The adjacent property to the east appears to be developed with several large buildings. Magnolia Boulevard and vacant land is observed to the north of the subject property. Vacant land and commercial development of observed to the south of the subject property. A small structure and vacant land is observed to the west of the subject property. The site vicinity consists primarily of vacant land with some commercial and residential development.

1952 The subject property appears to be developed as an electric generating facility. Magnolia Units #1 and #2 as well as the associated cooling towers are observed. The southern portion of the subject property appears to be used as a concrete manufacturing area. Storage of equipment is also observed in this area. One AST is located on the subject property. Additional structures and ASTs of the Magnolia Plant and the Olive Plant are observed in the photograph. The adjacent properties in all directions appear to be developed for commercial and industrial use. Residential development is observed in the site vicinity.

1968 The subject property remains continues to be used as an electric generating facility. What appears to be staining is observed adjacent to the east of Units #1 and #2 cooling towers. The southern portion of the subject property is now observed to be vacant. The adjacent properties continue to be used for commercial and industrial purposes. No significant changes are observed to the site vicinity.

1976 No significant changes are observed to the subject property, adjacent properties or site vicinity in the 1976 aerial photograph.

1989 No significant changes are observed to the subject property, adjacent properties or site vicinity in the 1989 aerial photograph.

1994 Storage of equipment is observed in the storage yards located on the subject property in the 1994 aerial photograph. No significant changes are observed to the adjacent properties or site vicinity.

4.5 SANBORN FIRE INSURANCE MAPS

URS reviewed Sanborn Fire Insurance Maps dated 1941, 1949, 1950, 1957, 1960, 1968, and 1970 for the subject property.

1941 The subject property appears to be used as an electrical generating facility in the 1941 Sanborn map. Magnolia Units #1 and #2 with associated cooling towers are observed.

No other development is observed adjacent to the Magnolia Units. The remainder of the subject property appears to be undeveloped except for a storage yard located on the southern portion of the subject property which appears to be occupied by the City of Burbank Street Department. A concrete batch plant is observed in the storage yard location. Sand bins and pits and concrete bins and pits are identified on the map. The southern portion of the subject property is also identified as a mobile equipment yard. The Olive Plant had not been developed in 1941. The remainder of the PSD facility consists of the water, light and power shops and storage yard as well as vacant land. The flood control channel is observed to the east of the PSD facility. Adjacent to the east of the Burbank Wash the Tide Water Associates Oil Company is observed. Several large ASTs are observed on the property. Adjacent to the east of the northern portion of the subject property a large commercial plant is observed.

1949 No significant changes are observed to the subject property, or adjacent properties in the 1949 Sanborn map.

1950 A small structure identified as a paint shop and several additional structures are observed adjacent to the east of the Magnolia #1 and #2 cooling towers. No other significant changes are observed to the subject property or adjacent properties in the 1950 map.

1957 A large AST labeled as a 78,000-barrel steel oil storage tank is now observed on the subject property. No significant changes are observed to the adjacent properties or the site vicinity on the 1957 Sanborn map.

1960 The paint shop is no longer present on the subject property. No other significant changes are observed to the subject property on the 1960 Sanborn map. The Olive Plant has been developed in on the adjacent property. The transfer and switch yard is now observed to the south of the Olive Plant.

1968 The concrete batch plant is no longer observed on the subject property. No other significant changes are observed to the subject property or adjacent properties.

1970 No significant changes are observed to the subject property or adjacent properties on the 1970 map.

4.6 HISTORICAL TOPOGRAPHIC MAPS

URS reviewed historical topographic maps dated 1902, 1953, 1966, 1972, and 1994 for the subject property and surrounding areas.

1902 The subject property appears to be vacant land in the 1902 map. The Southern Pacific Railroad is observed to the east of the subject property. The City of Burbank is

located to the east of the subject property and appears to be a small area with little development.

1953 The subject property is identified as a power plant in the 1953 map. The structures of the PSD facility are not yet identified on the map. A flood control channel is observed adjacent to the east of the subject property. Several oil tanks and buildings are observed adjacent to the flood control channel. The site vicinity appears to be developed with commercial and residential development.

1966 Magnolia Units #1 and #2 of the subject property are observed on the 1966 map. Additional buildings and tanks of the Magnolia and Olive plants are observed. Additional commercial development is observed on the adjacent property to the east of the subject property.

1972 No significant changes were observed to the subject property, adjacent properties or site vicinity on the 1972 map.

1994 No significant changes were observed to the subject property, adjacent properties or site vicinity on the 1994 map.

Ms. Tricia Winterbauer and Mr. Douglas Hahn of URS conducted a site reconnaissance of the subject property on November 1, 2000. The site visit consisted of a walking tour of the property. Site photographs are provided in Appendix A. URS' observations are noted below.

5.1 HAZARDOUS MATERIALS AND HAZARDOUS WASTES

URS reviewed the facility's Hazardous Materials Business Plan, dated, September, 1992. A varitey of hazardous substances are currently, and have historically been used and stored on the subject property. These include the following:

- Diesel
- Fuel Oil
- Dielectric Oil
- Sodium Hydroxide
- Phosphate
- Sulfuric Acid
- Chlorine
- Propane
- Ethylene Glycol
- Hydraulic Oil
- Transmission Fluid
- Mineral Spirits
- Lacquer Thinner

The facility maintains a Consolidated Permit/License to Operate #W474903 with the Los Angeles County Fire Department for use of aboveground storage tanks, use of underground storage tanks, hazardous materials storage and hazardous waste generation.

The facility maintins an EPA ID# CAD980360796 for the generation of hazardous waste. The facility currently and has historically generated the following types of hazardous waste:

- Waste petroleum oil
- Paint chips contaminated with lead
- Waste mercury
- Waste hydrochloric acid
- Waste flammable liquids
- Waste aerosols
- Waste asbestos-containing materials
- Waste oil containing Polychlorinated Biphenyls (PCBs)

The hazardous waste storage area for the PSD facility is located on subject property. Electrical transformers reportedly containing PCBs were observed to be stored in this area. The transformers were stored outside with no protection from the elements. This has historically been the storage area for hazardous waste. The transformers were observed to be stored on portable secondary containment units. No leaks or stains were observed in this area during the site reconnaissance. Secondary containment has reportedly not been used historically for the storage of hazardous waste. No soil sampling or analysis has been conducted in this area.

5.2 SOLID WASTE

Solid waste in the form of rubbish, wood, and scrap metal and equipment is currently generated at the subject property and is removed by a licensed waste hauler.

5.3 WASTEWATER

Sanitary sewage is currently generated on the subject property and is routed to the local treatment plant.

Industrial wastewater is currently generated on the subject property from cooling tower blow down and GAC wastewater discharge.

All sumps and cooling towers on the subject property and the adjacent portions of the Magnolia and Olive Plants are routed to a wastewater treatment area located adjacent to the east of the southern portion of the subject property. There are no oil/water separators, however, separation does occur in the main sumps located in every unit. Following treatment, wastewater is released to the flood control channel adjacent to the east of the subject property. The facility maintains a General NPDES Permit # CAG994002 with the Regional Water Quality Control Board, Los Angeles Region. The discharge point is located adjacent to the east of the southern portion of the subject property.

Two cooling towers #1 and #2 are located on the subject property adjacent to the Magnolia Units #1 and #2. The cooling towers were reportedly constructed in 1942-1944. The cooling towers are currently located in a concrete secondary containment berm. The cooling towers were previously located on bare soil. Sulfuric acid, caustic soda, and chrome compounds have been historically used in the cooling tower operations. There have been no soil samples taken beneath or around the cooling towers.

The facility maintains a General Permit to Discharge Stormwater from the State of California Water Resources Control Board. URS reviewed the facility's Notice of Intent for

Stormwater. A Stormwater Pollution Prevention Plan or other compliance documentation was not available for review. The stormwater discharge point is located on the eastern boundary of the southern storage yard of the subject property.

5.4 ABOVEGROUND STORAGE TANKS

Several aboveground storage tanks (ASTs) were observed on the subject property during the site reconnaissance.

Two approximately 1,000-gallon sulfuric acid tanks were observed adjacent to the east of Magnolia Cooling Tower #2. The two ASTs were observed to be located within the concrete secondary containment. The ASTs have been in operation since the cooling towers were constructed in the 1941-1942. No soil sampling has not been conducted in the areas of the ASTs.

The release of unknown quantities of caustic soda from a 1,000-gallon AST was reported to be constant for a 6-8 year period. The AST was located in an area adjacent to the west of Magnolia Cooling Towers #1 and #2. The AST was reported to be constructed of fiberglass and due to the integrity of the AST, caustic soda was continually released on to the ground in the area of the AST. The AST was removed in approximately 1982. Soil sampling and analysis was not conducted beneath or around the former AST.

One 78,000-barrel AST was observed on the subject property. The AST was reportedly empty and clean. The AST previously stored fuel oil. The AST is located on the bare soil but are surrounded by concrete secondary containment berms.

Additional ASTs were observed on the Magnolia and Olive Plants adjacent to the subject property.

A fuel oil AST was located adjacent to the east of Magnolia Unit #3. The AST reportedly spilled large quantities of fuel oil on the ground around the tank between 1976 and 1978. The AST was reportedly removed in the late 1970s. There were reportedly no soil samples taken in this area.

One 25,000-barrel was observed adjacent to the wast of the subject property. The AST was reportedly empty and clean. The AST previously stored fuel oil. The AST is located on the bare soil but are surrounded by concrete secondary containment berms.

Various additional ASTs were observed in the Magnolia and Olive Plants. These tanks are smaller, approximately 1,000-gallons or less and store substances such as sulfuric acid, sodium hydroxide, chlorine and caustic soda. These ASTS were observed to be within

concrete secondary containment units. No leaks or stains were observed beneath or around the ASTs.

5.5 UNDERGROUND STORAGE TANKS

As part of the operation of the electric generating units the City of Burbank required the use of various underground storage tanks (USTs). Five of the USTs were located on the northen portion of the subject property in the basement of Magnolia Units #1 and #2. Seven additional USTs were reported to currently or historically exist in in portions of the Magnolia and Olive Plants in areas adjacent to the subject property. The USTs are discussed in detail below.

Three approximately 10,000-gallon USTs were located on the subject property, in the basement between Magnolia Unit #1 and #2. The USTs were put into place in 1941 and reportedly contained fuel oil. The walls and foundations were poured around the USTs when the buildings were constructed. The USTs were reportedly removed in 1984, although the ends of the USTs are visible in the basement of Units #1 and #2. The USTs were reported to be in good condition with no visual leaking when they were taken out of service. No soil sampling was conducted during the removal of the USTs. No documentation of the tank closures was available for review.

According to a previous investigation conducted by El Capitan, USTs D-1 and D-2 were located on the subject property, adjacent to the east of Magnolia Cooling Tower #3, and were 20,000-gallon USTs constructed of single-wall steel.

A 40,000-barrel fuel oil UST is located adjacent to the north of the Olive operating units, adjacent to the west of the subject property. The UST was reportedly put in place in 1942. The UST was reportedly closed in place. No documentation was available regarding the tank closure. Soil sampling was reportedly not conducted.

A 53,000-barrel fuel oil UST is located beneath Olive Cooling Tower #2, which is located adjacent to the west of the southern portion of the subject property. The UST was reportedly put in place in 1963. The UST was reportedly closed in place. No documentation was available regarding the tank closure. Soil sampling and analysis was reportedly not conducted.

According to a previous investigation conducted by El Capitan, two USTs (Tanks F-1 and F-2) were closed in place at the Magnolia Unit #3, (adjacent to the south of the northern portion of the subject property). The USTs were removed in 1998. The USTs were constucted of reinforced concrete and had storage capacity of 40,000 barrels and 53,000 barrels. Analytical results of the subsurface soil samples collected from the bottom of the USTs did not show the

presence of significant petroleum hydrocarbons. No further investigation was recommended by El Capitan. For additional information see Section 4.3. A closure letter was not available for review. However, according to the City of Burbank Fire Department, a closure letter will be submitted shortly.

According to a previous investigation conducted by El Capitan, Tanks D-3, D-4, and D-5 were 40,000-gallon USTs that were located adjacent to the south of Olive Cooling Tower #1 (adjacent to the southwest of the southern portion of the subject property) and were constructed of single-wall steel. The three USTs had previously contained diesel fuel and excavated and removed from the site. Analytical results of soil samples beneath the USTs and stockpiles did not show the presence of TPH, BTEX or MTBE. Trace concentrations of ethylbenzene and total xylenes were reported in one soil sample collected beneath the piping. TPH was generally non-detectable. El Capitan recommended a site closure with no further action at the locations of the former USTs D-1, D-2, D-3, D-4, and D-5 and their associated piping. For additional information, see Section 4.3. URS obtained a closure letter from the City of Burbank Fire Department dated April 16, 1999.

According to a previous environmental investigation conducted by URS, five USTs were removed from the Public Service Yard located in the northwest corner of the PSD facility. The USTs included one 1,000-gallon steel UST containing waste oil, one 2,000-gallon steel UST containing solvents, two 10,000-gallon USTs containing unleaded gasoline, and one 5,000-gallon UST containing diesel. Following removal of the USTs, a total of 9 soil samples were collected beneath the tank locations and sidewalls of the excavation. The results of the soil samples were reported at well below PRGs. According to the City of Burbank Fire Department, a closure letter will be issued shortly.

5.6 DRUMS AND CONTAINERS

Drums and small containers of various hazardous materials were observed during the site reconnaissance and are reported to have historically been used in various areas of the subject property. A small machine shop located in Magnolia Unit #2 stored a variety of hazardous materials in small containers. Numerous 55-gallon drums and smaller containers were reported to be stored throughout Magnolia Units #1 and #2 when the units were operational. Drums were reportedly stored in the wastewater treatment area and the PCB storage area located on the eastern boundary of the southern portion of the subject property. Various chemical storage areas were observed in areas of the Magnolia and Olive Plants as well as the PSD maintenance facilities, which are considered adjacent properties. No leaks or stains were observed beneath the drums and containers during the site reconnaissance.

5.7 DRAINS, SUMPS, OR CLARIFIERS

Drains and sumps were observed on the subject property in the basement area of Magnolia Units #1 and #2. All floor drains flow to the sumps, which are routed to the wastewater treatment area prior to discharge.

Drains and sumps were also observed in other areas of the Magnolia and Olive Plants, which are considered adjacent properties. These drains and sumps are also routed to the wastewater treatment are prior to discharge.

A solvent sump reportedly released materials to the soil located in Magnolia Unit #3 (located adjacent to the south of the northern portion of the subject property) in approximately 1980. The soil was reportedly tested and approximately 15 feet of soil was removed and pea gravel replaced in the area. No documentation was available for review.

5.8 WELLS

Three groundwater supply wells were observed adjacent to the north of the Olive Plant, which is considered adjacent to the subject property. A large activated carbon treatment unit owned and operated by the City of Burbank is also located adjacent to the north of the Olive Plant. Water is pumped from the wells and run through the treatment unit prior to use. No analytical information regarding the quality of the groundwater was available for review.

5.9 DISCOLORED/STAINED PAVEMENT OR SOIL/STRESSED VEGETATION

Discolored soil and stressed vegetation were not observed on the subject property during the site reconnaissance.

5.10 PITS, PONDS, OR LAGOONS

Pits, ponds, or lagoons were not observed or reported to exist on the subject property.

A salt brine pit was previously located adjacent to the Magnolia Cooling Tower #3 (adjacent to the west of the subject property). The brine pit was put in place in approximately 1942 and continuously spilled large quantities of materials on to the ground around the pit. The pit was removed in 1962. No soil samples were taken in this area.

5.11 POLYCHLORINATED BIPHENYLS (PCB)

Transformers or other equipment which may contain PCBs were observed on the subject property.

A PCB storage area is located on the eastern boundary of the southern portion of the subject property. Equipment containing PCBs and waste oils containing PCBs have historically been stored in this location. Several pieces of equipment containing PCB oils were observed in this area during the site reconnaissance. The area was not observed to have secondary containment. URS was not provided access to a locked adjacent building which reportedly stored drums of waste oil containing PCBs.

Large transformers are currently and were historically stored adjacent to the Magnolia Units #1 and #2 Cooling Towers. These transformers were reported to historically have used oil containing PCBs. No additional information was available regarding these transformers.

5.12 ADDITIONAL CONCERNS

Various releases of hazardous materials were reported on the subject property and on the adjacent portions of the Magnolia and Olive plants.

Subject Property

An underground sulfuric acid line was reported to have leaked in a large area adjacent to the north of Magnolia Cooling Tower #2. The year of the release and approximate quantity of material released was unknown. Soil sampling and analysis was not conducted in the area of the release.

A sulfuric acid release was also reported from underground sulfuric acid lines located adjacent to the southeast of Magnolia Cooling Tower #2 in 1988. Approximately 30 gallons of material was released and was reportedly neutralized and removed from the facility. Soil sampling and analysis was not conducted in the area of the release.

A significant release of fuel oil from a tanker truck was reported in 1972 in the southern portion of the subject property located adjacent to the east of Olive Cooling Tower #2. The released fuel oil reportedly covered a large area. The material was reportedly covered with sand and removed for disposal. No soil sampling and analysis was conducted in the area of this release.

A portion of the subject property adjacent to the east of Magnolia Cooling Towers #1 and #2 was used as a dumping area from approximately the 1920s to the 1940s. The area was reportedly a section of the Burbank Wash, which now flows to the east of the Burbank PSD facility. URS observed the top of a concrete wall located in the asphalt. This wall is reported to have been the original wash boundary and the depth of the dumping area was reported to be approximately 12 feet. The top edge of a concrete wall was observed in this area during

the site reconnaissance. The dimensions of the wall are unknown, although it reportedly extended across the length of the subject property. Trucks reportedly backed up to the wall to dump contents into the wash. The materials dumped onsite are unknown, although it is anticipated that large pieces of equipment and other fill materials were dumped in this area.

Adjacent Property (Magnolia and Olive Plants)

Numerous releases of fuel oil were reported in the internal roadway adjacent to the north of the 25,000-barrel AST. The releases were reported from tanker trucks over several years and would flow through the streets of the PSD facility. No soil sampling and analysis was conducted in this area.

A vehicle maintenance shop is located in a structure adjacent to the southwest of the southern portion of the subject property. This structure was reportedly used as a vehicle maintenance shop for 50 years to maintain City of Burbank vehicles. Various hazardous materials were reportedly used and stored in the maintenance shop, including fuel, lubricating oil and cleaning solvents. It is unknown whether an oil/water separator was used.

6.1 DATABASE SEARCH

URS reviewed information gathered from several environmental databases through Environmental Data Resources, Inc. (EDR) to evaluate whether activities on or near the subject property have the potential to create adverse environmental impacts on the subject property. EDR reviews databases compiled by Federal, State, and local government agencies. The complete database search report is provided in Appendix B. It should be noted that this information is reported as URS received it from EDR, which in turn reports information as it is provided in various government databases. It is not possible for either URS or EDR to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence. The databases searched and the information obtained is summarized below.

Type of Database/Date	Description of Database/Effective Date	Search Radius	Number of Sites Identified
NPL	The National Priorities List (NPL) identifies uncontrolled or abandoned hazardous waste sites. To appear on the NPL, sites must have met or surpassed a predetermined hazard ranking system score, been chosen as a state's top priority site, pose a significant health or environmental threat, or be a site where the EPA has determined that remedial action is more cost-effective than removal action. Effective Date - 8/98	1 mile	1
CERCLIS	The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database identifies hazardous waste sites that require investigation and possible remedial action to mitigate potential negative impacts on human health or the environment. Effective Date - 6/98	0.5 mile	1
RCRA TSDs	Resource Conservation & Recovery Act (RCRA) treatment, storage, or disposal (TSD)	0.5 mile	1

Type of Database/Date	Description of Database/Effective Date	Search Radius	Number of Sites Identified
	sites Effective Date - 2/98		
RCRA Generators	RCRA-regulated hazardous waste generator notifiers list; both Large and Small Quantity Generators are included in this list. Effective Date - 2/98	0.25 mile	22
ERNS	EPA's Emergency Response Notification System (ERNS) list contains reported spill records of oil and hazardous substances Effective Date - 7/98	0.125 mile	0
SPL	State Priority List Hazardous Waste Sites Listing Effective Date - 7/98	1 mile	5
SWF/LS	State inventory of solid waste disposal and landfill sites Effective Date - 6/98	0.5 mile	0
LUST	List of information pertaining to all reported leaking underground storage tanks Effective Date - 4/94 to 8/98	0.5 mile	8
UST	State storage tank sites listing of underground petroleum bulk storage and chemical bulk storage tanks Eeffective Date - 12/97	0.25 mile	16
AST	State storage tank sites listing of aboveground petroleum bulk storage and chemical bulk storage tanks Effective Date - 9/97	0.25 mile	0

Subject Property

The subject property was identified on the Cortese, UST, LUST Ca. FID, PADS, FINDS, RCRIS-LQG, HMS and HAZNET databases. The database reported the facility as a large quantity generator of hazardous waste. The subject property was reported to generate waste oil, waste halogenated solvents, and PCB waste. No violations were reported associated with hazardous waste. The database indentified the use of 13 USTs onsite. The subject property reported a release of diesel to soil. The status was reported as pollution characterization underway. No additional information available on the EDR database report.

Surrounding Properties

The majority of the facilities reported were located topographically and hydraulically downgradient or crossgradient, or based on the regulatory status are not anticipated to impact the subject property. The remaining facilities are discussed below.

San Fernando Valley, Crystal Springs Wellfield Area is located less than 1/8 mile to the north of the subject property. The facility was identified on the CERCLIS, FINDS, NPL, ROD, and Cal-Sites databases. The facility reported a release of chlorinated organic solvents to groundwater (PCE and TCE). The facility is a listed NPL site that has reported human health risk assessment, ecological risk assessment, RI/FS, Record of Decision, and Order on Consent. No additional information was provided by EDR. Based on the proximity of the facility from the subject property and the regulatory status of the facility, the potential of this facility to impact the subject property is high.

Texaco Food Mart, at 400 Victory Boulevard is located less than 1/8 mile west/southwest of the subject property. The facility was identified on the Cortese and LUST databases. The facility reported a release of diesel to soil. The status of the facility was reported as remedial action in progress. No additional information was reported by EDR. Based on the release to soil only, the potential for this facility to impact the subject property is low.

Magnolia Car Wash, at 910 Magnolia Boulevard is located less than 1/8 mile west/southwest of the subject property. The facility was identified on the LUST database. The facility reported a release of gasoline. The status of the facility was reported as no leak action taken by responsible party after initial report of leak. No additional information was reported by EDR. Based on this information, the potential for this facility to impact the subject property is low to modcrate.

Continental-Hagen Facility at 5 Olive Street West is located ¼-1/2 mile east of the subject property. The facility reported a release of gasoline to groundwater. The status of the facility

was reported as pollution characterization. No additional information was provided by EDR Based on this informtion, the potential for this facility to impact the subject property is low.

URS reviewed the Orphan Sites list, which are sites that have not been geocoded based on lack of sufficient data regarding their exact location within the general area. The facilities listed as orphan sites do not appear to be located within ½ mile of the subject property and are not expected to have an environmental impact on the subject property.

6.2 REGULATORY CONTACTS

URS contacted local and state agencies to obtain information regarding the subject property, such as the status of environmental permits, violations, or corrective actions. The following agencies were contacted.

Burbank Fire Department (BFD): URS conducted a file review at the BFD on November 20, 2000. URS reviewed several previous environmental documents pertaining to the subject property. See Section 4.3 for additional information obtained during the file review.

Department of Toxic Substance Control (DTSC): The DTSC has not yet responded to our request for information.

Regional Water Quality Control Board (RWQCB): The RWQCB does not have any files pertaining to the subject property.

Los Angeles County Department of Environmental Health (LCDEH): The LACDEH has not responded to our request for information.

URS will attempt to conduct file reviews at the above agencies that maintain files for the subject property. If information collected in the file review process changes the conclusions and
recommendations of this report, a letter report will be submitted.

7.1 ASBESTOS CONTAINING MATERIALS

Asbestos-containing materials (ACM) are known to be present within limited areas of the project Site, primarily in the form of Transite® (cement asbestos composite) panels associated with the Units #3 and #4 cooling towers. These non-friable panels are located at the facility exterior, and do not pose any immediate risk to personnel health. Historically, ACMs at the facility have been abated on an as-needed basis, usually to facilitate necessary maintenance or upgrade work to existing systems. URS personnel reviewed existing limited documentation regarding historic suspect material testing and analysis at the facility, however, no comprehensive survey data currently exists. Based on a the site reconnaissance, limited additional ACMs may be present that would be impacted by proposed demolition activities, however, the identification and removal of these potential materials does not appear to be a major issue in the context of the larger project.

7.2 LEAD-BASED PAINT

Any of the painted metal components, features and fixtures associated with the affected areas of Units #1 and #2 should be assumed to contain lead. No sampling, testing or other data exists for the facility concerning the potential presence of lead-based paint (LBP). All loose, blistered or flaking paint is considered hazardous waste by regulation, and should be handled accordingly in conjunction with the demolition sequence. Assuming that all or most of the scrap metal will be subject to some form of recycle/reuse as opposed to actual disposal, the remaining painted surfaces in good condition are considered a demolition item and should be handled by the demolition contractor with regard for all applicable worker safety, training and PPE regulations or requirements, including notification to the "receiver" of said materials that LBP paint is present.

This report presents the results of a Phase I Environmental Site Assessment (Phase I ESA) conducted by URS Corporation (URS) of a portion of the City of Burbank Public Services Department (PSD) facility located at 164 West Magnolia Boulevard in Burbank, California. Specifically, the ESA focused on the portion of the overall site expected to be used for the Magnolia plant expansion. The majority of the PSD facility is occupied by electrical generating and utility service equipment, and a smaller portion of the facility is occupied by other PSD maintenance facilities. The Phase I ESA was conducted to evaluate the potential for material environmental impairment at the site associated with past and current site operations and nearby land use, and to identify Recognized Environmental Conditions (RECs) affecting the subject property. The Phase I ESA was conducted in accordance with the methods and procedures described in the American Society for Testing and Materials (ASTM) "Standard Practice for Site Assessments: Phase I Environmental Site Assessment Process" (E 1527-97 as currently amended). The Phase I ESA was conducted pursuant to, and in accordance with, the URS proposal dated, September 1, 2000, as authorized by the Southern California Public Power Authority (SCPPA) and the City of Burbank. Following is a summary of our findings.

The subject property consists of only a portion of the City of Burbank PSD facility. The subject property includes Magnolia Units #1 and #2, associated cooling towers and areas to the east of the cooling towers, a transformer storage area, a large 78,000-barrel aboveground storage tank (AST) and a storage yard located adjacent and to the east of the Olive Cooling Tower #2. Magnolia Units #1 and #2 were constructed in 1941 and 1943 and then shutdown in the 1980s. Most major mechanical, electrical control, instrumentation equipment, boiler piping were removed in the 1980s. Units #1 and #2 building structures, steam turbines and cooling towers remain in place. The 78,000-barrel fuel AST was put in place in the mid 1950s and is reportedly currently empty and clean. The remainder of the subject property has historically been used for City of Burbank Street Department activities and included a concrete batch plant and a vehicle storage area. The area is currently used as a storage area and was observed to be asphalt paved during the site reconnaissance. Several bins of waste wood and scrap metal were observed on the northern boundary of this area. The remainder of the area was observed to be vacant.

Significant quantities of hazardous materials were observed on the subject property and the adjacent portions of the PSD facility during the site reconnaissance. Significant quantities of petroleum products and hazardous substances associated with cooling towers were reported to have been historically stored at the PSD facility in ASTs and underground storage tanks (USTs).

A review of available environmental databases indicates the subject property was identified on the Cortese, UST, LUST Ca. FID, PADS, FINDS, RCRIS-LQG, HMS and HAZNET databases. The database reported the facility as a large quantity generator of hazardous waste. The subject property was reported to generate waste oil, waste halogenated solvents, and PCB

waste. No violations were reported associated with hazardous waste. The database identified the use of 13 USTs onsite. The subject property reported a release of diesel to soil. The status was reported as pollution characterization underway. No additional information was available on the EDR database report.

Based on the Phase I ESA results described herein, the following conclusions are made:

On-Site Recognized Environmental Conditions (RECs)

Based on information obtained through completion of this Phase I ESA, RECs from on-site sources have been identified and are summarized below:

- Sulfuric acid, caustic soda, and chrome compounds have been historically used in the cooling tower operations. Because the cooling towers were previously located on bare soil and due to the length of time the cooling towers have been in operation, the potential of subsurface impacts to the subject property exists.

- A historical dumping area was located on the subject property. Because the type and quantity of materials dumped in this location are not known, the potential for subsurface impacts to the subject property exists.

- One 78,000-barrel AST is located on the subject property. The AST previously stored fuel oil. The AST is located on bare soil. No soil sampling or analysis has been conducted beneath or around the AST.

- Three fuel oil USTs were historically located in the basement between Magnolia Unit #1 and #2. The USTs have reportedly been removed, although no soil sampling and analysis was conducted, and no closure report was provided.

- Storage of a variety of hazardous materials such as sulfuric acid, caustic soda, hazardous waste, PCBs, and paint related materials has occurred and these materials have been used throughout the subject property. Releases of caustic soda and sulfuric acid were reported on the northern portion of the subject property. Because of the reported releases and the potential historic housekeeping issues onsite, there is potential for these materials to have impacted the soil beneath the site.

- A large release of fuel oil from a tanker truck was reported on the subject property. No soil sampling or analysis was conducted in this area.

Off-Site Recognized Environmental Conditions (RECs)

Based on URS's review of historical information and the environmental database search, RECs from off-site sources have been identified and are summarized below.

- A solvent sump reportedly released materials to the soil located in Magnolia Unit #3 (located adjacent to the south of the northern portion of the subject property). No documentation pertaining to the sump was available for review.

- Several large USTs (40,000-barrel and 53,000-barrel) were located in the PSD facility adjacent to the subject property. The USTs were reportedly closed in place. No documentation was available regarding the tank closures. Soil sampling and analysis was reportedly not conducted.

- One 25,000-barrel AST is located the north and the northwest of the southern portion of the subject property. The AST previously stored fuel oil. The AST is located on the bare soil. No soil sampling or analysis has been conducted beneath or around the AST.

- A vehicle maintenance shop is located adjacent to southwest of the subject property. Based on the historic use and storage of hazardous materials in this location there is potential for the subsurface of the subject property to have been impacted.

- One facility that is anticipated to have a high potential to impact the subject property was identified on the EDR database report less than 1/8 mile to the north of the subject property. The San Fernando Valley, Crystal Springs Wellfield Area was identified on the CERCLIS, FINDS, NPL, ROD, and Cal-Sites databases. The facility reported a release of chlorinated organic solvents to groundwater (PCE and TCE). The facility is a listed NPL site that has reported human health risk assessment, ecological risk assessment, RI/FS, Record of Decision, and Order on Consent.

Phase II investigations are recommended for those portions of the PSD property that are currently under consideration for redevelopment, including the new power block area and the new cooling tower area. Subsurface investigations will be conducted in selected locations to evaluate the potential presence of petroleum hydrocarbons or other hazardous materials in site soils that may be attributable to prior site operations and facilities. Phase II investigations will involve completing geophysical surveys, exploratory excavations and soil borings in selected locations within the planned redevelopment area. Selected soil samples collected during these investigations will be submitted for laboratory chemical testing of suspected contaminants. Recommended Phase II work will be undertaken in a series of interrelated tasks, including the following:

Task 1 – Project Initialization
Task 2 – Geophysical Survey and Exploratory Excavations
Task 3 – Drilling and Soil Sampling
Task 4 – Laboratory Testing Program
Task 5 – Reporting

The general scope and objectives of these individual tasks are further described below.

TASK 1 – PROJECT INITIALIZATION

Project initialization involves performing all preparatory tasks necessary to ensure the safe and efficient implementation of field activities at the site. A Phase II project kick-off meeting will be convened at the site to review the nature and timing of the planned investigations with site personnel and to coordinate these activities with site operators so as to minimize potential disruption of ongoing site business activities. Following the kick-off meeting, a site tour will be conducted with the appropriate site personnel to perform a reconnaissance of planned work areas, properly locate and mark planned soil boring locations, and discuss the sequence, timing and logistics of the field investigation program. Task 1 will also involve finalization of all subcontractor agreements and work schedules and preparation of a site-specific Health & Safety Plan to ensure site worker safety.

TASK 2 – GEOPHYSICAL SURVEY AND EXPLORATORY EXCAVATIONS

Task 2 will focus upon defining the nature of undocumented fill materials reported to have been placed beneath the eastern edge of the planned redevelopment area along the former course of the Burbank Wash. Because current plans call for the new cooling tower and portions of the new power block to be constructed across this portion of the site, it is important to evaluate the nature of subgrade materials in this area.

A variety of surface geophysical tools will be used to conduct a non-invasive survey of subgrade materials in this portion of the site. Initial magnetic and electromagnetic surveys will be conducted in a grid pattern across the area suspected to comprise the uncontrolled fill area (Figure 3). The grid survey will be conducted to screen the fill area for possible buried debris, equipment or other possibly deleterious conditions (e.g., voids, oversized material, etc.). Findings of the initial geophysical grid survey will be evaluated and detected anomalies will be further assessed using ground-penetrating radar (GPR). Selected targets identified using GPR will then be explored using a backhoe to provide access for visual examination, identification and, if appropriate, collection of soil samples for possible laboratory chemical analysis. Findings of the completed geophysical survey and exploratory excavations will also provide additional information to assist in properly locating soil borings to evaluate subsurface environmental and geotechnical conditions. Selected surface geophysical instruments will also be used to clear all other planned soil boring locations of subsurface utilities and other potential obstructions.

TASK 3 – DRILLING AND SOIL SAMPLING

Drilling, subsurface soil sampling and laboratory chemical testing will be performed at selected locations across the planned redevelopment area to evaluate the nature and magnitude of potential soil contamination associated with prior site operations and facilities. A total of 28 soil borings will be advanced throughout the area. Soil boring locations are illustrated in Figure 3. Soil borings will be completed using hollow-stem drilling equipment or, in areas of limited access, hand auger and manual sampling equipment. All hollow-stem borings will be advanced to a depth of approximately 15 feet below ground surface (bgs), but will be extended as necessary to define the vertical extent of any observed soil contamination. As practicable, hand auger borings will be extended to a depth of approximately 10 feet bgs. No borings will be extended below the local groundwater table, estimated to be at approximately 100-125 feet bgs.

The majority of soil borings will target the locations of former or existing features and facilities which were identified as Recognized Environmental Conditions (RECs) in the Phase I ESA. Other borings are to be completed in areas with a general potential for having been impacted by former site operations, based upon our understanding of prior site operations, facilities, features, and chemical use and storage history. Specific features/facilities and general areas to be investigated are indicated in Figure 3, and include the following:

- Existing 78,000 above-ground barrel fuel oil storage tank
- Previous diesel fuel USTs
- Hazardous waste storage area
- Transformer storage areas
- Uncontrolled fill area
- Previous paint shop

- Above-ground sulfuric acid storage tanks
- Previous fuel oil USTs beneath Magnolia Units 1 and 2
- General area surrounding cooling towers east of Magnolia Units 1 and 2.

TASK 4 – LABORATORY TESTING PROGRAM

Selected soil samples collected from soil borings or exploratory excavations will be submitted for laboratory chemical testing to determine the nature and magnitude of soil contamination that may be present. Samples will be selected for analysis based upon visual indications of contamination and field screening measurements using a photo-ionization detector. It is anticipated that a minimum of one and a maximum of three soil samples will be selected for chemical analysis from each soil boring. Samples from exploratory excavations will be analyzed only if evidence of soil contamination is observed. Samples will be tested for chemicals that are either known, or reasonably suspected to be associated with the facility/feature of specific interest. For example, soil samples collected from the area surrounding the large above-ground fuel oil storage tank will be tested for fuel hydrocarbons, semi-volatile organic compounds and metals, those collected from transformer storage areas will be tested for PCBs and petroleum hydrocarbons, and those collected around the cooling towers will be tested for pH and metals, including hexavalent chromium (chromium IV). Chemical testing to be performed on soil samples will include one or more of the following tests:

- Volatile organic compounds by EPA Method 8260b
- Semi-volatile organic compounds b EPA Method 8270
- Polychlorinated biphenyls (PCBs) by EPA Method 8082
- California Title 22 metals by EPA Method 6000/7000 series
- Chromium VI by EPA Method 7196
- Total petroleum hydrocarbons by EPA Method 418.1
- Fuel hydrocarbons by EPA Method 8260 and GC/MS combination
- pH (corrosivity) by EPA Method 150.1.

Analytical results will be used to evaluate the nature and magnitude of soil contamination that may be present within the redevelopment area, and to assist in determining if corrective actions may be necessary.

TASK 5 – DATA ANALYSIS AND REPORTING

Task 5 involves the consolidation, analysis and presentation of all data acquired during completion of the preceding tasks. The findings for all field activities and laboratory analytical testing performed will be presented and discussed in a summary report. The report will describe the nature of the work completed, summarize the salient findings and conclusions, and present recommendations regarding the potential need for corrective

measures necessary to allow site redevelopment to proceed. The report will include a map of all exploratory locations, tabular and graphical summaries of laboratory analytical results, geologic logs of all soil borings an exploratory excavations completed, and the results of the geophysical surveys conducted. The report will be submitted in draft form for review and comment prior to finalization.

The conclusions presented in this report are professional opinions based solely upon indicated data described in this report, visual observations of the site and vicinity, and our interpretation of the available historical information and documents reviewed, as described in this report. They are intended exclusively for the purpose outlined herein and the site locations and project indicated.

It should be recognized that this study was not intended to be a definitive investigation of contamination at the subject property and the conclusions provided are not necessarily inclusive of all the possible conditions. Given that the scope of services for this investigation was limited and that exploratory borings, soil and/or groundwater sampling or analytical testing was not undertaken, it is possible that currently unrecognized subsurface contamination may exist at the site. URS makes no representations regarding the value or marketability of the site or the suitability for any particular use, and none should be inferred based on this report.

Opinions and recommendations presented herein apply to the site conditions existing at the time of our investigations and cannot necessarily apply to site changes of which URS is not aware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or the works of man on the subject site or adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

Aerial photographs: provided by Environmental Data Resources, Inc. (EDR) for the years 1928, 1952, 1968, 1976, 1989, and 1994.

El Capitan Environmental Services, Inc., D-1, D-2, D-3, D-4 and D-5 Closure Report, September 1998.

El Capitan Environmental Services, Inc., Underground Fuel Oil No. 6 (F-1 and F-2) Storage Tank Closure Report, September 1988.

Environmental Data Resources Database Report.

Historical topographic maps dated 1902, 1953, 1966, 1972, and 1994 for the subject property and surrounding areas.

Personal Interview: Mr. Michael Simmonds, Power Plant Supervisor, November 1, 2000.

Sanborn Fire Insurance Maps dated 1941, 1949, 1950, 1957, 1960, 1968, and 1970 for the subject property.

URS Greiner Woodward Clyde, Underground Storage Tank Closure Report for Tanks T-1 through T-5, City of Burbank Public Service Yard, May 3, 1999.

USGS Topographic Map 7.5 Minute, "Burbank," quadrangle.

APPENDIX A
SITE PHOTOGRAPHS

APPENDIX B
ENVIRONMENTAL DATABASE REPORT